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Total Number of Pages in This Submission	26

Application Number	10/724,574
Filing Date	November 28, 2003
First Named Inventor	Karl-Heinz Wendt
Art Unit	1762
Examiner Name	Cameron, Erma C.
Attorney Docket Number	1085-029

ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
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- ☐ Drawing(s)
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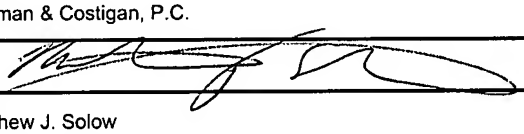
Signature			
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1085-029

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)	
	)	
Karl-Heinz Wendt	)	Group Art Unit: 1762
	)	
Serial No.: 10/724,574	)	Examiner : Cameron, Erma C.
	)	
Filed : November 28, 2003	)	

For : **COATED GLASSES AND METHOD FOR THEIR MANUFACTURE**

New York, NY 10036
August 20, 2007

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY TO EXAMINER'S ANSWER

Sir:

Appellant submits the present brief in response to the Examiner's Answer, dated June 18, 2007 and in support of the Notice of Appeal filed on September 29, 2006 and the Brief on Appeal filed on February 2, 2007 in the above-identified application. Reversal of the Examiner's rejections respectfully is requested based on the following arguments. Appellant believes no fee is required for submission of this brief. Notwithstanding, the Commissioner is hereby authorized to charge Deposit Account No. 08-1540 for any fee required. A duplicate copy of this sheet is enclosed.

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Matthew J. Solow, Reg. No. 56,878

I. REAL PARTY IN INTEREST

The invention of the present application is the property of Karl-Heinz Wendt, the real party in interest, through virtue of being the inventor.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences known to Appellant or its legal representatives.

III. STATUS OF CLAIMS

Claims 1, 3, 5, 8, 10-12, 16-17, 19-25 and 27 currently stand rejected. The rejection of claims 1, 3, 5, 8, 10-12, 16-17, 19-25 and 27 is appealed herein. Claims 6, 7, 9, 13, 14, 18 were canceled before the filing of the Notice of Appeal, and Claims 2, 4, 15 and 26 were canceled in an Amendment Under 37 C.F.R. §41.33(b) that was submitted concurrently with Appellant's Brief on Appeal on February 2, 2007.

IV. STATUS OF AMENDMENTS

The Examiner has not entered Appellant's "Amendment After Final Rejection Under 37 CFR §1.116" that was filed on August 30, 2006.

The Examiner has entered Appellant's Amendment Under 37 C.F.R. §41.33(b) that was submitted concurrently with Appellant's Brief on Appeal on February 2, 2007.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention of Claim 1 is directed towards a method for manufacturing a glass body having a glass surface and a coating applied thereto. *See* Specification at p. 1, line 3 and p. 2, lines 7-8. The method comprises a series of steps. The first step in the method is cleaning and/or coating at least a partial area of the glass surface with a primer/cleaner. *See* Specification at p. 2, lines 25-31. The second step in the method is partially covering the glass surface with a masking film. *See* Specification at p. 2, lines 32-33. The third step in the method is applying an isocyanate-curing polyacrylate lacquer (*see* Specification at p. 2, lines 34-35) comprising mineral particles having an average diameter of 2 to 30 μm (*see* Specification at p. 6, line 7) and a solvent to at least a partial area of the glass surface (*see* Specification at p. 5, line 13) wherein the polyacrylate lacquer is a 2-component lacquer obtainable from at least one polyacrylate binder containing mineral particles and at least one isocyanate hardener having two or more reactive isocyanate groups per molecule, which are optionally protected isocyanate groups, and the solvent share in the polyacrylate lacquer is 20 to 80% w/w prior to application. *See* Specification at p. 3, lines 26-30 and p. 5, lines 11-16. The fourth step in the method is removing the masking film. *See* Specification at p. 3, line 1. The fifth step in the method is curing the coating (*see* Specification at p.3, line 37) to form a partially or completely cured coating having a layer thickness of 10 to 50 μm. *See* Specification at p. 4, lines 9-10.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The first issue now on appeal (due to new grounds of rejection instituted by the Examiner in the Examiner's Answer) is whether the rejection of Claims 1, 3, 5, 8, 10-12, 16, 19-25 and 27

under 35 U.S.C. 103(a) as being unpatentable over EP 665252 (Okamoto) taken in view of EP 428937 (Calahorra) and further taken in view of Kirk-Othmer Encyclopedia of Chemical Technology, 4th Ed., 1995, Vol. 14, pages 498-99 (Kirk-Othmer) should be reversed.

The second issue now on appeal is whether the rejection of Claim 17 under 35 U.S.C. 103(a) as being unpatentable over EP 665252 taken in view of EP 428937 and further taken in view of Kirk-Othmer and further taken in view of Ellenson et al. (U.S. Pat. No. 2,969328) should be reversed.

VII. ARGUMENT

The present invention is directed towards a method for manufacturing a glass body having a glass surface and a coating applied thereto. The first step of the method is to clean and/or coat at least a partial area of the glass surface with a primer/cleaner. The second step involves partially covering the glass surface with a masking film. The third step of the method is to apply an isocyanate-curing polyacrylate lacquer comprising mineral particles having an average diameter of 2 to 30 μm and a solvent to at least a partial area of the glass surface. The polyacrylate lacquer is a 2-component lacquer obtainable from at least one polyacrylate binder containing mineral particles and at least one isocyanate hardener having two or more reactive isocyanate groups per molecule, which are optionally protected isocyanate groups, and the solvent share in the polyacrylate lacquer is 20 to 80% w/w prior to application. The next step involves removing the masking film. The final step is to cure the coating to form a partially or completely cured coating having a layer thickness of 10 to 50 μm.

A. THE FIRST REJECTION UNDER 35 U.S.C. 103(a) IN VIEW OF OKAMOTO, CALAHORRA AND KIRK-OTHMER

In the Examiner's Answer of June 18, 2007, the Examiner instituted a new ground of rejection, rejecting Claims 1, 3, 5, 8, 10-12, 16, 19-25 and 27 under 35 U.S.C. 103(a) as being unpatentable over EP 665252 (Okamoto) taken in view of EP 428937 (Calahorra) and further taken in view of Kirk-Othmer Encyclopedia of Chemical Technology, 4th Ed., 1995, Vol. 14, pages 498-99 (Kirk-Othmer).

Appellant submits that it would not be obvious to one of ordinary skill in the art to modify the Okamoto reference with the teachings of the Calahorra and Kirk-Othmer references in order to create that which Appellant claims as the invention. As an initial matter, Appellant notes that the Examiner implicitly agreed that the claims are not obvious in view of Okamoto and Calahorra because the Examiner withdrew that rejection in the Examiner's Answer. Merely citing one entry from a chemical encyclopedia for screen process inks cannot render obvious claims that are directed towards a method for manufacturing a glass body having a glass surface and a coating applied thereto.

More specifically, Okamoto plainly is concerned with a procedure to obtain **permanent** although removable films on **glass** surfaces. *See* Okamoto at p. 12, lines 51-58 (describing how the composition separated from the glass sheets to which it was applied). In direct contradistinction, Calahorra is concerned with spraying a **temporary** coating onto **plastic sheets**. *See* Calahorra at p. 2, lines 35-43 (describing Calahorra's invention as providing "a temporary coating" which "can be removed by simply washing it off" of the plastic sheet to which it is applied). In fact, the Calahorra reference never once mentions the word "glass." The two cited references are simply too remote from each other to be properly combined together. In fact,

because one reference teaches preparing a removable, permanent film and the other teaches a temporary coating (expedients which are opposite each other), the references teach away from making the combination. *See In re Icon Health and Fitness, Inc.*, --F.3d--, 2007 WL 2189161, *5 (Fed. Cir. August 1, 2007) (citing *KSR Int'l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1739-40 (2007) for the proposition that "when the prior art teaches away from a combination, that combination is more likely to be nonobvious."); *see also In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992) (noting that references may be properly combined only if they are reasonably pertinent to the problem that the inventor attempts to solve); *McNeil-PPC, Inc. v. Perrigo Co.*, 443 F.Supp.2d 492 (S.D.N.Y. July 27, 2006) ("[w]hen resolving an obviousness issue, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *Id.* at 517 (quoting *Grain Processing Corp. v. Am. Maize-Prods. Co.*, 840 F.2d 902, 907 (Fed. Cir. 1988))).

The third reference, Kirk-Othmer, is even further removed from the first two references. Kirk-Othmer refers to silk screen inks that may be applied to materials as diverse as paper posters, metal signs, glass, ceramics or plastics. Kirk-Othmer does not teach what type of ink to use for each material, and the reference definitely does not teach an ink according to the disclosure of Okamoto. More specifically, Kirk-Othmer refers to the solution of resins in solvents in the boiling range of VM & P naphtha. In contrast, Okamoto requires a dispersion in water, but this is not mentioned in Kirk-Othmer with respect to glass coatings because Kirk-Othmer only suggests using water-based writing inks on "cellulosic fibers in paper substrates." *See* Kirk-Othmer at p. 499, lines 17-20.

Furthermore, the method that Kirk-Othmer teaches to apply the ink is vastly different from the method of the present invention and from either of the other two references. Kirk-

Othmer describes forcing an ink with a squeegee through a screen stencil. The screen stencil, by its very nature, must allow ink to pass through its mesh whereas the masking film of the present invention is impenetrable to ink. A screen stencil is made of a piece of porous, finely woven fabric (traditionally of silk, but modern methods typically use polyester). The fabric is stretched over a frame, and areas of the screen are blocked off with a non-permeable material to form a stencil (actually a positive of the image to be printed). More particularly, the open spaces are where the ink is meant to appear. Silk screen coatings usually have thicknesses of well above 200 μm due to the fact that they have been pressed through a woven mesh of considerable thickness. The ink that is in the mesh opening is transferred by capillary action to the substrate in a controlled and prescribe amount (i.e., the wet ink deposited is equal to the thickness of the stencil). *See* http://billhood.blogspot.com/2007/07/choosing-mesh-count.html; *see also* http://en.wikipedia.org/wiki/Serigraphy. The method used in silk screen printing differs from the claimed masking limitation of the present invention in that the silk screen itself is used to guide where the ink is placed whereas in the present claimed method, the masking is used to guide the ink.

Even if it were obvious to combine the three references (which it is not, because the three references are remote, as demonstrated above), that which Appellant claims as the invention still would not be created. The present claimed invention is directed to **durable**, **non-removable** films permanently adhered to **glass** with **well-defined particle sizes** present, whereas Okamoto teaches films made on glass but then removed from the glass; Calahorra teaches temporary films made on plastic sheets; and Kirk-Othmer teaches inks that are milled. In this respect, Okamoto forms a film by applying a 2-component aqueous lacquer (*see* Okamoto at p.1, lines 3-4) to a glass surface, and, due to the nature of glass, the film is easily separated from the glass surface

(though it should be noted that the film, as mentioned above, is permanent; it just does not stay attached to the glass surface). For example, if the invention of Okamoto were mistakenly applied to a glass window, a razor blade could easily be used to remove the Okamoto invention because glass is a very polar substrate. However, as noted above, Appellant's claimed invention cannot be so easily separated from the glass substrate as it is very **durable and non-removable** as well as **permanent**. A person of ordinary skill in the art would consider the invention of Okamoto unsuitable to apply to glass when a **durable** *and* **permanent** film is required. *See* Okamoto, p. 12, lines 51-58 (showing that the coating films separated from the glass sheets after one day, seven days, and thirty days). In contrast, Appellant's invention withstands sunlight, heat, and humidity. *See* Specification at p. 11, lines 12-14, 24-26 and p. 14, lines 1-6.

Furthering the fact that Appellant's invention would not be created by the combination of the three references is that Kirk-Othmer requires the ink to be milled. *See* Kirk-Othmer at p. 498, line 38 ("After premixing, the ink is ground on a three-roll or media mill."). Milling would create particles of randomly various sizes, not the well-defined particle sizes as claimed by the present invention. Combining the references would lead to an ink that is milled because Okamoto is silent regarding the presence of particles, and Calahorra also does not fill this gap. Therefore, any combination of the references would not teach the present invention which requires mineral particles having well-defined sizes and that forms a durable, permanent film on glass.

Appellant further submits that the claimed invention is entirely different from and not disclosed or taught by Okamoto on a number of other different levels.

First, the present invention is chemically different from that of Okamoto in that the claimed invention does not call for an acrylic-siloxane copolymer component containing water

wherein the acrylic copolymer is dispersed as solid matter in water and instead comprises a solvent for dissolving the polyacrylate. Okamoto's film also necessarily requires siloxane bonds. *See* Okamoto at p. 10, lines 22-23. Okamoto's copolymeric acrylate-siloxane are chemically distinct from the claimed polyacrylate, which excludes the siloxane component of Okamoto because the claimed polyacrylate is only urethane crosslinked. Therefore, the two coatings are chemically very distinct from each other.

Additionally, the coating of the present invention is hard and nonflexible whereas Okamoto's film can be elongated. *See* Okamoto at p. 14, lines 1-55 (Table 2).

Moreover, the film obtained by Okamoto is 200 μm thick. *See* Okamoto at p. 12, line 57. Okamoto does disclose film thicknesses of 1 to 1000 μm but not in connection with coated glass surfaces. *See* Okamoto at p. 10, lines 16-17. In the only portion of Okamoto disclosing a thickness on glass, the thickness taught is much greater than that of the claimed invention. *See* Okamoto at p. 12, line 56 (teaching a 200 μm coating on glass). The present invention instead requires film thickness of 10 to 50 μm which relates to the diameter of the particles of 2 to 30 μm contained in the lacquer. This ensures that the glass coating is opaque and at the same time transparent to light. In fact, as noted below, these features (coating thickness and particle size), along with the inclusion of mineral particles, provide for improved light transmission.

Okamoto also does not disclose the masking foil used in the claimed invention. It is not conventional to mask a glass surface to be coated, and none of the references apply a masking film. The Examiner simply states that it is conventional to mask a glass surface without citing references. Kirk-Othmer does not teach masking a glass surface, it only teaches screen printing, and, as noted above, it does not teach using water-based inks on glass at all. The Examiner's contention that it is conventional to mask a glass surface must be supported by an affidavit by the

Examiner, which was not provided. *See* 37 C.F.R. §1.104(d)(2). Clearly, the applied references do not teach masking of the glass. The use and removal of the masking foil are positive limitations recited by the claimed invention that are not disclosed or taught by any of the applied references. Notably, Appellant respectfully submits that one would not employ a masking film where the purpose is to prepare a permanent film once removed from the glass, as taught by Okamoto.

Appellant notes that the Okamoto reference does recite a listing of additives (*see* Okamoto at p. 10, lines 10-13), but it does not disclose mineral particles as claimed in Claim 1. Recited in the list are metallic particles and coloring pigments. These, however, are not the same as the claimed mineral particles. Furthermore, the dyes of Claim 8 of the appealed invention are added on top of the mineral particles.

The average particle diameter represents another difference between the claimed invention and the Okamoto reference. The average particle diameter refers to the dispersed copolymer in the aqueous dispersion. However, it can be assumed that there are no other particles of a larger size in Okamoto; otherwise the particle diameters of about 0.01 to about 1μm of the disperse phase (*see* Okamoto at p. 9, line 25) would not have been given (or, at the very least, are not determinable in the presence of larger particles). It is also likely that because the polyacrylate phase is a dispersion of a polar polymer, it is not possible to disperse mineral particles at the same time without obtaining unwanted coagulation and precipitation of both. *See* Okamoto at p. 9, lines 20-25.

The Calahorra reference does not provide the missing aspects of the Okamoto reference. As an initial matter, the Calahorra reference is directed to a temporary coating which simply can be washed away. *See* Calahorra at p. 2, lines 33-36. The isocyanate-cured polyacrylate lacquer

as claimed herein cannot be washed off by water. Furthermore, Calahorra is directed to "a wide variety of polymers and copolymers of the type generally used in coating technology. There may be used suitable alkyd resins, vinyl resins, epoxies, polyurethane, acrylics, chlorinated rubber, polycarbonates, polyesters and copolymers of any of these." *See* Calahorra at p. 2, lines 44-46. None of these are isocyanate-cured polyacrylate lacquers such as those called for in the present claimed invention.

Additionally, the percentage of matter in the compositions are very different: Calahorra teaches that "[b]ased on parts by weight, compositions of the invention contain typically from about 20 to 50 parts binder, 5 to 20 parts solvents, 0.5 to 3 parts additives, 2 to 15 parts plasticizer, and from about 2 to 20 parts reflective particles (pigments)." *See* Calahorra at p. 2, lines 51-53. No isocyanate or solvent share of 30 wt. % or higher is disclosed, as in the present invention.

Finally, the Calahorra coating is not applied to glass surfaces, it is only applied to plastic sheets (i.e., polyolefins). *See* Calahorra at p. 2, lines 42-43 and p. 3, lines 6-11. In fact, the word "glass" is not mentioned anywhere in the Calahorra reference.

As noted above, Kirk-Othmer does not fill the gap left by the first two references because it requires the ink to be milled and does not teach using water-based inks on glass surfaces. Also as noted above, Kirk-Othmer only teaches silk screen printing but fails to disclose the claimed masking limitation.

Therefore, because it would be unobvious to one of ordinary skill in the art to combine the three references, and because, even if the three references improperly were combined, that which Appellant claims as the invention would not be created, Appellant respectfully requests

reversal of the Examiner's rejection of Claims 1, 3, 5, 8, 10-12, 16, 19-25 and 27 under 35 U.S.C. 103(a).

B. The Second Rejection Under 35 U.S.C. 103(a) in View of Okamoto, Calahorra and Kirk-Othmer and Further in View of Ellenson

In the Examiner's Answer of June 18, 2007, the Examiner instituted a new ground of rejection, rejecting Claim 17 under 35 U.S.C. 103(a) as being unpatentable over Okamoto taken in view of Calahorra and Kirk-Othmer and further in view of Ellenson et al. (U.S. Patent No. 2,969,328).

Appellant respectfully submits that it would not be obvious to one of ordinary skill in the art to combine the Okamoto reference with the Calahorra and Kirk-Othmer references for the reasons discussed above. The addition of the Ellenson patent does not make it obvious to combine these other three references, thus curing the above-described defect. Moreover, even if it were obvious to one of ordinary skill in the art to combine the four references (which it is not), that which Appellant claims as the invention still would not be created, as discussed above. Additionally, the invention as claimed would not be created because Ellenson does not teach the removal of isocyanate-cured polyacrylate lacquers with halogen hydrocarbons as called for in Claim 17. Furthermore, Ellenson does not mention any coatings that contain mineral particles.

Therefore, Appellant respectfully requests reversal of the Examiner's rejection of Claim 17 under 35 U.S.C. §103(a).

C. Unexpected Results as a Secondary Consideration of Non-Obviousness

One of the factual determinations relevant to an argument of obviousness is whether the present invention caused unexpected results. *Syntex (U.S.A.) LLC v. Apotex, Inc.*, 407 F.3d 1371, 1378 (Fed. Cir. 2005) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966)); *Glaxo Group Ltd. v. Apotex, Inc.*, 376 F.3d 1339, 1349 (Fed. Cir. 2004) (citing *Graham* for the proposition that unexpected results in an invention favors a determination of non-obviousness); *see also KSR*, 127 S.Ct. at 1740 (citing *United States v. Adams*, 383 U.S. 39 (1966) for the holding in *Adams* that "[t]he fact that the elements worked together in an unexpected and fruitful manner supported the conclusion" of nonobviousness.).

In the instant case, the Appellant's invention unexpectedly provides surprising results over the prior art. The present invention provides specially coated glass bodies that simultaneously are opaque and translucent. Such a combination is unobvious over the prior art opaque glass bodies, which have been available by abrasion methods (such as sand blasting), attaching foils, etching or covering with conventional coatings which do not contain mineral particles.

The coating of the present invention actually enhances light transmission but still provides full sight screen protection. Furthermore, the coating of the present invention is more easily and more effectively disinfected, and it has superior chemical resistance when treated with disinfectants or surfactants (which is one of the reasons why the coating of the present invention is favored by hospitals). Additionally, the coating of the present invention (unlike those of the prior art) can be used on certified fire-resistant glass. These novel and unobvious features are described in more detail below.

1. Improved Light Transmission

The coating of the present invention enhances light transmission properties, as noted in the specification. In contrast, foils, sandblasted, and etched glass normally greatly reduce the permeability of light. Due to the layer thickness of Appellant's invention (10 to 50 μm) relative to the size (2 to 30 μm) and number of mineral particles, light is reflected over a wide range of incoming angles and either directly transmitted through the glass or reflected again on the coating to finally pass through the glass. The transmission of normal daylight through a glass pane coated with the present invention is enhanced by 30% when compared to an untreated and fully transparent glass pane.

Appellant notes that, while improved light transmission is not specifically claimed, it is inherent based upon the claimed layer thickness and claimed particle size.

2. Improved Disinfection

One of the major uses of the coating of the present invention is in hospitals to make built-in glass surfaces (such as windows to hospital rooms) opaque. For such applications, masking is required because the coating should not be applied directly to the sealing that flexibly holds the glass pane within the groove of the window frame.

Prior art etched or sand blasted surfaces, or those covered with an adherent plastic foil, have been shown to be hard-to-clean breeding grounds for bacteria, fungi and viruses. Surprisingly, the present invention has been shown to actually have an antiseptic effect. For example, methicillin-resistant Staphylococcus aureus ("MRSA") is a recognized cause of nosocomial infections. As noted in the specification, bacteria (such as MRSA), viruses, etc. are easily eliminated from a glass covered with the coating of the present invention. In contrast, the prior art coatings served as reservoirs for the bacteria.

The coating of the present invention has such an unexpected and surprising result that the Commission for Hygiene Safety of Medical-Technical Products and Processes of the German Society of Hospital Hygiene has certified the coating of the present invention as conforming to the strictest safety standards of hospital hygiene. The German language certification was submitted as Exhibit A to Appellant's Brief on Appeal. Appellant has only recently come into possession of a certified English translation of this certification, however it is not being submitted as evidence because it is Appellant's understanding that such a submission would cause prosecution to be reopened under 37 C.F.R. §41.39(b)(2). Appellant notes that the Examiner stated that no translation was supplied (Examiner's Answer at p. 8), therefore Appellant will supply the certified translation upon request by either the Board of Patent Appeals and Interferences or by the Examiner as long as so doing does not serve to reopen prosecution.

3. Fire Resistant Glass

Fire resistant panes are made from special glass and are of a special build. Such panes are individually certified for their fire resistance. Such fire resistant glass is not allowed to be etched, sandblasted or covered with adhesive foils after certification as these processes would affect the fire resistance capabilities. However, the coating of the present invention can be applied to fire resistant glass and not change the properties of that glass, as noted in the specification. Furthermore, the coating does not blacken when exposed to fire; rather, it becomes slightly brown when first exposed to heat. Above temperatures of 1200°C, the coating of the present invention becomes fully transparent which is an obvious advantage for fire rescue personnel.

In order to help convey the idea of the invention, Appellant previously submitted color photographs of coated glass made using the method of the present invention as Exhibit B to Appellant's Brief on Appeal.[1]

D. The Examiner's Response to Appellant's Previous Arguments

In the Examiner's Answer, the Examiner responded to Appellant's arguments in Appellant's Brief on Appeal, even though the Examiner withdrew the rejections to which Appellant's arguments were directed. Appellant fully believes that the above arguments show that the newly instituted rejections should be reversed, but Appellant also respectfully disagrees with several of the Examiner's responses and is taking this opportunity to correct some perceived misconceptions.

Appellant notes that the Examiner argues that Okamoto teaches removing the coating only for testing purposes, and not because it is anticipated that this would be the normal way the coating is treated. Appellant respectfully disagrees with the Examiner and notes that Okamoto explicitly states that "[t]he coating films separated from the glass sheets..." *See* Okamoto at p. 12, line 52. The films were not separated by an outside force, rather they separated from the glass sheets of their own accord after being dried for specified periods of time. This, therefore, is obviously how Okamoto teaches forming the films under normal conditions, not merely testing conditions.

Appellant notes that the Examiner contends that Calahorra does not teach exclusively a temporary coating. Appellant respectfully disagrees with the Examiner and notes that Calahorra itself explicitly states that it "provides a **temporary coating** that can be applied...when frosty or

[1] These photographs were also submitted to the Examiner as part of Appellant's Amendment After Final Rejection Under 37 CFR §1.116 that was filed on August 30, 2006 but not entered by the Examiner.

too high temperatures are forecast. When the extreme conditions are over, the coating **can be removed** by simply washing it off, such as with a water jet." Calahorra at p. 2, lines 33-36. It seems that the Examiner considers Calahorra to teach a permanent coating because there is the possibility that someone will not wash it off. The point, however, is that it *can be* easily removed when someone so desires; in contrast, the present claimed invention provides a coating that *cannot be* removed.

The Examiner's position that because Okamoto contains acrylate and isocyanate with two or more isocyanate groups it is not chemically different from the claimed invention falls flat. The Examiner is not reading the full teaching of Okamoto but is rather cherry-picking out what is useful and out of context. References must be considered as a whole. *See Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 448 (Fed. Cir. 1986) ("It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art." *Id.* quoting *In re Wesslau*, 353 F.2d 238, 241 (CCPA 1965)). Okamoto teaches that it requires siloxane bonds in order to work. Okamoto at p. 10, lines 22-26. Appellant's invention does not require siloxane bonds in order to work.

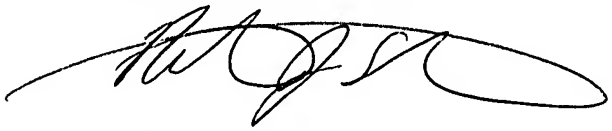
The Examiner also contends that the average particle diameter of 0.01 – 1 μm in Okamoto does not constitute a difference between Okamoto and the present invention because "there are no claims as to particle size of the polymers in the claimed invention." Appellant respectfully disagrees with this statement and notes that Claim 1 recites "...[a]pplying an isocyanate-curing polyacrylate lacquer comprising mineral particles **having an average diameter of 2 to 30 μm**..." (emphasis added).

Appellant notes that the Examiner states that Calahorra "is used for an appropriate mineral particle size to be used on a transparent coating for good reflective properties." Appellant believes the Examiner is arguing that the proper mineral particle size in Calahorra is inherent based upon the use to which the coating is to be put. However, there is nothing in Calahorra that teaches what this mineral particle size should be, and the Examiner has not provided any probative evidence as to the particle size of Calahorra.

E. CONCLUSION

Based on the above, Appellant respectfully submits that the pending claims are patentable over the cited prior art and that the rejections of the Examiner properly are reversed. Favorable action is respectfully requested and earnestly solicited.

Respectfully submitted,



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VIII. CLAIMS APPENDIX

1. A method for manufacturing a glass body having a glass surface and a coating applied thereto, characterized in that the method comprises the following steps:

- Cleaning and/or coating at least a partial area of the glass surface with a primer/cleaner;
- Partially covering the glass surface with a masking film;
- Applying an isocyanate-curing polyacrylate lacquer comprising mineral particles having an average diameter of 2 to 30 μm and a solvent to at least a partial area of the glass surface, wherein the polyacrylate lacquer is a 2-component lacquer obtainable from at least one polyacrylate binder containing mineral particles and at least one isocyanate hardener having two or more reactive isocyanate groups per molecule, which are optionally protected isocyanate groups, and the solvent share in the polyacrylate lacquer is 20 to 80% w/w prior to application;
- Removing the masking film; and
- Curing the coating to form a partially or completely cured coating having a layer thickness of 10 to 50 μm.

3. The method according to Claim 1, characterized in that the primer includes or comprises a polar, organic solvent having 2 to 12 carbon atoms, and at least one chemical group selected from the group consisting of alcohol, keto, aldehyde, ester and acid group.

5. The method according to Claim 1, characterized in that the polyacrylate lacquer containing mineral particles is applied via silk-screen printing, spraying or rolling.

8. The method according to Claim 1, characterized in that the mineral particles are oxides or mixed oxides of aluminum and/or silicon, including hydrates thereof.

10. The method according to Claim 1, characterized in that dyes are added to the polyacrylate lacquer to manufacture color coatings.

11. The method according to Claim 1, characterized in that the glass body consists of acrylic glass, fire-resistant glass or multi-layer/composite glass.

12. The method according to Claim 24, characterized in that the glass body is single-sheet safety glass, and the coated glass has a surface tension that is roughly the same or maximally reduced by 10% relative to the uncoated glass.

16. The method according to Claim 1, characterized in that the hardener contains a C4 to C12 diisocyanate and, optionally, a silane derivative.

17. A method according to claim 1, characterized in that the method additionally involves the step of removing the applied coating without damaging the glass surface using a halogen hydrocarbon-containing stripper.

19. The method according to Claim 3, characterized in that said polar, organic solvent is a C2 to C3 alcohol.

20. The method according to Claim 19, characterized in that said polar, organic solvent has less than 5% w/w of water.

21. The method according to Claim 20, characterized in that said polar, organic solvent has less than 1% w/w of water.

22. The method according to Claim 1, characterized in that the cured coating has a layer thickness of 15 to 30 μm.

23. The method according to Claim 1, characterized in that the mineral particles have an average diameter of 5 to 25 μm.

24. The method according to Claim 11, characterized in that said glass body is selected from the group consisting of multi-layer composite glass, fire-resistant glass of type G-glazing, and single sheet safety glass (ESG).

25. The method according to Claim 11, characterized in that said coating is further applied to the glass surface in built-in condition.

27. The method according to Claim 3, characterized in that said solvent has 2 to 4 carbon atoms.

IX. EVIDENCE APPENDIX

No evidence is being submitted with this Reply Brief.

X. RELATED PROCEEDINGS APPENDIX

There are no related appeals or interferences known to Appellant or its legal representatives.